WHAT IS CLAIMED IS:

1. A shoestring tying apparatus comprising:

a fastening member for fastening a shoestring having a configuration including a disk, to which one end of the shoestring is connected, which is supported by a shaft for winding up the shoestring;

an operating rotational member for rotating said fastening member, wherein

in the event of rotating said operating rotational member in a predetermined direction, said disk is rotated so as to wind up said shoestring, thereby tying said shoestring,

in the event of stopping rotation of said fastening member, tension of said shoestring is maintained, and

in the event of releasing engagement of said operating rotational member and said fastening member, and rotating said disk in the reverse direction so as to be returned to the initial state, the shoestring is released;

a connection portion for connecting to said operating rotational member; and

a rotational member including driving means for rotating said connection portion, wherein said driving means is manually or automatically operated so as to rotate said operating rotational member several times, and so as to rotate said disk of said fastening member, thereby tying

said shoestring.

2. A shoestring tying apparatus according to Claim 1, wherein said connection portion of said rotational member serves as fitting means for fitting to the face of said operating rotational member.

3. A shoestring tying apparatus, said driving means comprising:

a cylinder including an elastic member fixed to the rotational shaft thereof for winding an operating cord on the outer circumference thereof;

restricting means including an engaging member disposed so as to allow said cylinder to rotate in a predetermined direction, and so as to prevent said cylinder from rotating in the reverse direction; and

a connection portion for connecting to said operating rotational member.

4. A shoestring tying apparatus according to any of Claim 1 through Claim 3, wherein said rotational member is disposed between said operating rotational member and said fastening member;

and wherein said operating rotational member is rotated by manual or automatic operation of said driving means of

said rotational member so as to rotate said disk of said fastening member several times, thereby tying said shoestring.

5. A shoestring tying apparatus comprising:

a fastening member for fastening a shoestring having a configuration including a disk, to which one end of the shoestring is connected, which is supported by a shaft for winding up the shoestring;

an operating rotational member for rotating said fastening member, wherein,

in the event of rotating said operating rotational member in a predetermined direction, said disk is rotated several times so as to wind up said shoestring, thereby tying said shoestring,

in the event of stopping rotation of said fastening member, tension of said shoestring is maintained, and

in the event of releasing engagement of said operating rotational member and said fastening member, and rotating said disk in the reverse direction so as to be returned to the initial state, the shoestring is released;

a fitting portion serving as fitting means for connecting to said operating rotational member connected to said fastening member for fastening said shoestring;

a rotational member for rotating said fitting portion;

an elastic member included within a cylinder of said rotational member, of which one end is fixed to the rotating shaft of said rotational member so that said elastic member is wound up at the time of said rotational member being rotated in the direction for tying said shoestring;

a ratchet including an engaging pawl for allowing rotation in a predetermined direction, disposed within said cylinder of said rotational member on the same axis, which rotates so as to return to the initial state due to the elastic force of said elastic member at the time of releasing engagement of said engaging pawl and said rotational member;

an operating cord, which is wound up on the circumference of said cylinder of said rotational member, for rotating said rotational member; and

a divided cover member for storing said fitting member, said rotational member including said elastic member, said ratchet, and said operating cord, wherein said operating cord can be extracted from said cover member;

wherein at the time of extracting said operating cord, said fitting portion and said rotational member are rotated in the direction for tying said shoestring, as well as winding up said elastic member;

and wherein at the time of releasing said operating cord following said extracting operation, said operating

cord is retracted inside due to returning action of said elastic member, and only said ratchet is rotated in the reverse direction without said rotational member being rotated;

and wherein at the time of extracting said operating cord from said cover member again, the rotational member is rotated.

6. A shoestring tying apparatus comprising:

a fastening member for fastening a shoestring having a configuration including a disk, to which one end of the shoestring is connected, which is supported by a shaft for winding up the shoestring;

an operating rotational member for rotating said fastening member, wherein,

in the event of rotating said operating rotational member in a predetermined direction, said disk is rotated so as to wind up said shoestring, thereby tying said shoestring,

in the event of stopping rotation of said fastening member, tension of said shoestring is maintained,

and in the event of releasing engagement of said operating rotational member and said fastening member, and rotating said disk in the reverse direction so as to be returned to the initial state, the shoestring is released;

a rotational member including

one or the other of

a fitting portion integrally formed on said operating rotational member, and

a fitting portion for fitting to said operating rotational member, and

a cylinder including an internal gear on the inner face thereof disposed adjacent to said fitting portion;

a ratchet including pawl-storage portions on the outer circumference thereof for storing a plurality of pawls for engaging with said internal gear, including an engaging opening on a predetermined side thereof, and including a shaft fitting opening at the center thereof for rotatably fitting to a rotational shaft, which is fit within said cylinder of said rotational member;

a spring storage member including a protrusion on a predetermined side thereof for engaging with said engaging opening of said ratchet, including a recessed groove on the outer circumference thereof for winding up an operating cord, including a space formed therein for storing a helical spring, and including a through hole for rotatably fitting to said rotational shaft to which one end of said spring is fixed; and

a cover member including

a back cover, having a fitting opening on the center thereof for fitting to and supporting said rotational

shaft, for covering said spring storage member, and

a front cover, having an opening on the side of said fitting portion of said rotational member, for covering said entire rotational member;

wherein said pawls of said ratchet for engaging with said internal gear of said rotational member are forced at all times in the direction of being engaged with said internal gear of said rotational member by an elastic member so as to be stored in said pawl-storage portions;

and wherein said rotational shaft to which one end of said helical spring is fixed is rotatably fit to said spring storage member;

and wherein said spring storage member including said wound helical spring is fit and mounted within said back cover so that one end of said rotational shaft is fit to said shaft opening of said back cover;

and wherein said protrusion of said spring storage member is engaged with said engaging opening of said ratchet of said rotational member;

and wherein one end of said operating cord is connected to the free end of said helical spring;

and wherein said front cover is fit to said back cover;

and wherein the other end of said operating cord can be extracted outside.

7. A shoestring tying apparatus having

a fastening member for fastening a shoestring having a configuration including a disk, to which one end of the shoestring is connected, which is supported by a shaft for winding up the shoestring; and

an operating rotational member for rotating said fastening member, wherein, in the event of rotating said operating rotational member in a predetermined direction, said disk of said fastening member is rotated so as to wind up said shoestring, thereby tying said shoestring, in the event of stopping rotation of said fastening member, tension of said shoestring is maintained, and in the event of releasing engagement of said operating rotational member and said fastening member, and rotating said disk in the reverse direction so as to be returned to the initial state, the shoestring is released, said shoestring tying apparatus comprising:

an internal core including

an internal gear disposed in the inner face thereof, and

an engaging gear;

an operating rotational member which comprises a cover member including

a plurality of pawls on the inner face thereof,

a cylindrical engaging gear for engaging with said

engaging gear of said internal core, which rotates only in the direction for tying said shoestring, and

a gear set which engages with a ratchet serving as a rotational member included therein at the time of pressing the center portion thereof inwards;

a spring storage member including

a plurality of pawls supported with shafts for engaging with said internal gear of the inner face of said internal core, and

a helical spring disposed therein;

an operating cord fixed to one end of said helical spring, or fixed to the outer circumference of said spring storage member to which one end of said helical spring is fixed, for winding up said helical spring included in said spring storage member; and

a fastening member having a disc, for winding up said shoestring, which is integrally rotated along with said spring storage member by engaging therewith;

wherein said shoestring is tied by means of rotating said fastening member by rotating said operating rotational member by hand, or by means of operating said fastening member through said spring storage member by pulling said operating cord.